



# Ryś USB adapter



## User Guide

## Installation

Ryś adapter has been designed for connecting to mouse/joy port of the Amiga computer. In case of some Amiga models usage of additional adapters allowing Ryś's connection may be required. The installation procedure should always be performed with the Amiga being powered off. One should connect Ryś to the chosen port (mouse or joystick) and tightening up the holding screws. After turning the Amiga back on, Ryś is ready to use.

## Operation modes

Connecting of any USB device and its activation, Ryś signals with lighting on "Status" LED.

Adapter automatically detects a type of the connected device, which may fall into one of the two categories:

- mouse
- joystick/pad

When Ryś detects a mouse, it automatically begins emulation of Amiga mouse-equivalent. When adapter finds joystick or pad, then its default behaviour is to enter 'Pad mode'. When one connects USB joystick, Ryś should be switched into 'joystick mode' (action that is not necessary in the case of connecting a pad) Operation mode change can be achieved by pressing joystick's **9** and **10** buttons at the same time. Adapter will confirm the mode change with Status-LED pulsation. The similar operation can be carried out when the device being connected is a pad. Then one should simultaneously press **SELECT** and **START** buttons.

## Operation mode change signalling

Device signals its operation mode change with following Status-LED pulsation sequences:

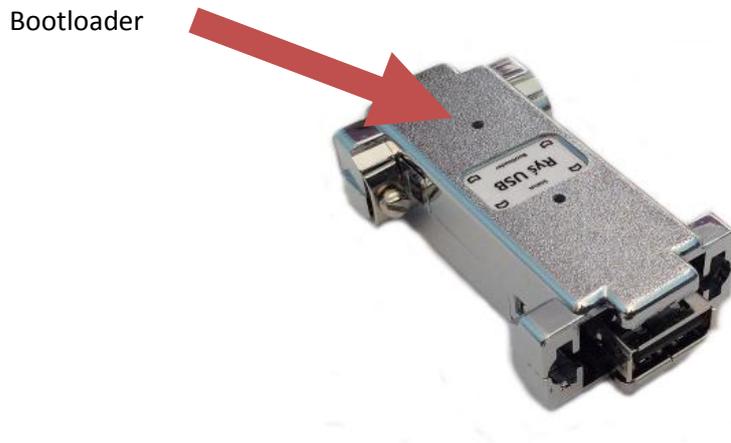
- 1 blip - **Joystick** mode
- 2 blips – **Pad** mode

## Function mapping in Joystick/Pad operation mode

Joystick	Pad
<ul style="list-style-type: none"><li>• 9 + 10 – operation mode switch</li><li>• 1 - fire1</li><li>• 2 - fire2</li><li>• 3 - fire3</li><li>• 6 - autofire1</li><li>• 5 - autofire2</li></ul>	<ul style="list-style-type: none"><li>• SELECT + START - operation mode switch</li><li>• X - fire1</li><li>• O - fire2</li><li>• [] - fire3</li><li>• R2 - autofire1</li><li>• L2 - autofire2</li></ul>

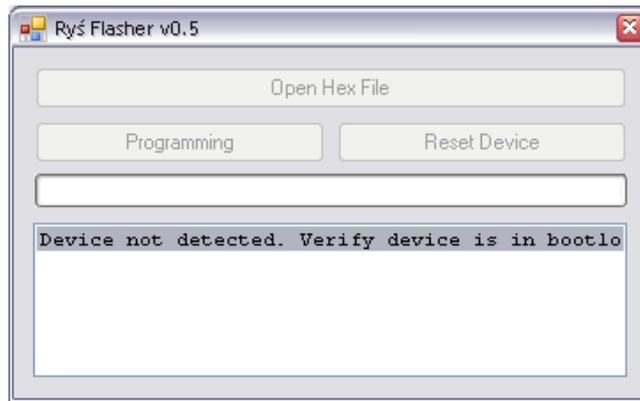
## Updating adapter's firmware (Bootloader).

In order to update adapter's firmware, one put the device into Bootloader mode. It should be performed by pressing (with something pointed) the button located on adapter's case and labelled **Bootloader**.



When pressing and holding the **Bootloader** button, one should connect the device via USB cable to the PC running Windows. After being recognized by Windows OS, adapter switches into **Bootloader** mode which is confirmed with continuous pulsation of the **Status** LED.

The next required step is to launch on the connected Windows PC **RyśFlasher** application that will update firmware of the adapter.



When application detects connected Ryś adapter it will enable **Open Hex File** button. Firmware update procedure looks as follows:

- One should press **Open Hex File** button and choose a file containing updated firmware image (which results in enabling **Programming** and **Reset Device** buttons).
- One should press **Programming** button and wait for the flashing process to complete.
- After completion of the flashing process, one should press **Reset Device** button, which switches Ryś back into normal operation mode allowing its disconnecting from the PC.

Having followed the above procedure one can connect the adapter back to the Amiga.

All files required for the updating procedure can be downloaded from <http://retro.7-bit.pl> website.

## Aknowledgements

Special thanks go to [gegu](#) and [Dorian3d](#) of PPA Internet forum (<http://www.ppa.pl>).